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ABSTRACT

This paper discusses the outcomes of a meta-analysis that reviewed primary studies from eight major databases to investigate the impact of role ambiguity and conflict in the burnout of special education teachers. Five role constructs were found to be present in the literature on burnout among special educators: role ambiguity, role conflict, role expectations conflict, role overload, and role self-concept. Meta-analyses were conducted for each of these role constructs and the various relationships they share with burnout constructs. With the exception of role conflict, effect sizes were given or derived for each of the role constructs and six distinct burnout constructs (frequency and intensity of emotional exhaustion, depersonalization, and personal accomplishment). Multiple effect sizes for role conflict were found only for its relationship to emotional exhaustion. Specifically, the average effect size estimate for both the frequency and intensity for emotional exhaustion as it related to role ambiguity indicates a small positive relationship between these two constructs, the frequency of depersonalization shares a small positive relationship with role ambiguity, and the intensity of personal accomplishments reveal a small but clearly inverse relationship with role ambiguity. (Contains 39 references and 6 tables.) (CR)

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Running head: RELATIONSHIP BETWEEN BURNOUT AND ROLE TENSIONS

The "Role" of Burnout among Special Educators:

The Relationship between Burnout and Role Tensions

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THE "ROLE" OF BURNOUT AMONG SPECIAL EDUCATORS:

THE RELATIONSHIP BETWEEN BURNOUT AND ROLE TENSIONS

For a wide variety of reasons, special educators often experience burnout. In fact, Singer (1993) found that special educators typically stay with their chosen profession for only six years. In one study, educators who had left the field of special education actually cited "became burned out" as the second most common reason for leaving their jobs; being "burned out" was second only to the generic response of "needed a change" (Billingsley & Cross, 1992, p. 502). A number of studies have analyzed burnout in special educators. Research has attempted to differentiate the characteristics of burnout among special educators according to gender, age, years of experience, special education category, and training background (Banks & Necco, 1990; Billingsley & Cross, 1991; Crane & Iwanicki, 1986; Fimian & Blanton, 1986).

So what can we learn from such research? In a field where attrition is high and accountability is even higher, the ability to prevent or alleviate burnout among special educators can be vital. This presentation will offer a closer look at burnout among special educators; it will present information intended to enlighten researchers and current practitioners as to what the current available research says about burnout in special education. It will also interpret this research in order to facilitate a better understanding of both the current and future status of burnout among special educators.

Theoretical Framework

Burnout

Many scholars have attempted to define the construct of burnout. Originating a mere twenty-five years ago with Freudenberger's (1977) research in the helping professions, burnout remains a relatively new area of study in the social sciences (Banks & Necco, 1990; Stout, 1987). Freudenberger (1977) first coined the term "burnout," using it to describe persons who appear to be depressed with their jobs. Burnout can be identified through the appearance of fatigue, persistent colds, headaches, insomnia, and exhaustion; these signs are caused by over-exertion of a person's energy, strength, or resources. Behavioral indicators of burnout such as anger, irritation, cynicism, paranoia or drug use may also be apparent (Stout, 1987). Blase broadens this definition of burnout so that it includes any adverse reaction that occurs from stress in the workplace (as cited in Dedrick & Raschke, 1990).

Most authors tend to agree that burnout refers to an extreme form of job stress (Cherniss, 1988; Dedrick & Raschke, 1990; Maslach, 1982; Wisniewski & Gargiulo, 1997); in fact, some researchers go so far as to make these

two terms, job stress and burnout, synonymous (Male & May, 1997). Beer and Beer (1996) state that burnout results from chronic stress in the workplace. Christina Maslach (1982), perhaps the most widely accepted authority on burnout and author of the Maslach Burnout Inventory , describes this condition as "a response to the chronic emotional strain of dealing extensively with other human beings, particularly when they are troubled or having problems" (p. 3); therefore, in Maslach's opinion, burnout can be defined as "one type of stress" (p. 3).

While often defining burnout by its characteristics, most researchers do agree that burnout can be attributed to some type or combination of types of external or environmental causes (Morgan & Krehbiel, 1985). Other researchers, however, explain burnout not as a form of stress, but rather as the "chronic inability to cope with stress" (Greer & Greer, 1992, p. 169). In a study by Torelli and Gmelch (1992), stress was found to be the most common predictor of burnout. Burnout is also frequently defined by the appearance of its symptoms: feeling irritable, tired, angry, and/or frustrated (Gold, 1989); becoming detached, cynical, or apathetic are also symptoms often used in defining burnout (Guglielmi & Tatrow, 1998). Hudson and Meagher (1983) cite Freudenberger's description of burnout as "a state of fatigue or frustration brought about by devotion to a cause, way of life, or relationship that failed to produce the expected reward" (p. 47). These authors further explain that burnout usually affects persons who are highly motivated, hard-working, and idealistic in the workplace. The failure of this idealism brings about the feelings most often associated with burnout.

Because Maslach's theoretical model of burnout is by far the most accepted explanation of its kind, the three constructs found in this model are also the most widely used burnout constructs. These constructs include emotional exhaustion, depersonalization, and personal accomplishment. The three subscales of the Maslach Burnout Inventory are quite distinct. Emotional exhaustion refers to cases of burnout in which a person feels emotionally (or psychologically) tired or worn out, with little or no energy. Depersonalization describes a condition in which a person feels insignificant or meaningless. His or her reactions to other persons are less caring and more harsh than before. Reduced personal accomplishment is used to explain a person's feelings of inadequacy, futility, or dissatisfaction in the workplace (Crane & Iwanicki, 1986; Gmelch & Gates, 1998). All three subscales are measured according to frequency and intensity.

Role Constructs

Another aspect to be considered in the study of job burnout is the importance of roles. Fimian and Blanton (1986) discuss the concepts of role identity and role ambiguity as they are found in special educators. Role identity

refers to the special educator's understanding of his/her role – expectations, characteristics, responsibilities, relationships - within the school. When role identity is clear and seemingly not in conflict with other members of the school (teachers, administrators, etc.), burnout is less likely to be found. However, when a special educator's role identity is not clear, role ambiguity can occur. Role ambiguity, meaning that the special educator is uncertain of what his/her role in the school is, is often closely related to teacher burnout (Fimian & Blanton, 1986; Holland, 1982). Another commonly measured role construct is role conflict, which indicates that a person's multiple roles within a job are in conflict with each other or may even be in conflict with the person's expectations of what his or her role(s) should be. When educators are not sure of what is expected of them, when they lack the information or support to understand what their role should be, then burnout is often a consequence.

Intent of the Inquiry

Meta-analysis of topics in special education is also being encouraged by other researchers. Guskin (1984) states that "meta-analysis is to be considered a powerful tool that has already begun to help us reduce the confusion of a growing and heterogeneous research literature" (p. 79). Because inquiry in special education often involves small groups or even individuals, meta-analysis is the tool of choice, for it allows one to synthesize the findings of numerous studies, no matter how small they may be. Kavale (1984) also encourages the use of meta-analysis with special education topics: "the variability in the findings of special education research creates a gap between past and future research, a gap that can be bridged by the intermediate step of synthesizing findings into a comprehensive whole" (p. 62). Indeed, this inquiry synthesizes the vast research on job burnout among special educators in order to offer a more complete and thorough understanding of this important topic.

Research Objectives

Using the techniques for meta-analysis described by Hunter and Schmidt (1990), six main objectives were accomplished in this study. First, all available primary studies that addressed burnout among special educators and contain adequate quantifiable data were identified. Second, the research hypotheses for each of these primary studies were specified, along with the target population, burnout constructs, and predictor constructs used in the development of these hypotheses. Third, the statistical hypotheses and inferential rules needed for synthesizing the data found in each research hypothesis were specified. Fourth, population effect sizes for each research hypothesis were estimated. Fifth, moderator variables relative to each research hypothesis were identified. Sixth, the stability

of each population effect size was explored. Twenty-three research questions were used to directly achieve each of the above objectives.

Research Procedures

The design of this research model was conceptualized as a 14-stage model based on the work of Thompson, McNamara, and Hoyle (1997). The model appears in Table 1.

Table 1

Design of the Inquiry

Stage	Description
Stage 1	Developing the theoretical framework
Stage 2	Specifying the population
Stage 3	Designing the classification system
Stage 4	Designing the coding system
Stage 5	Coding the data
Stage 6	Archiving the coded data
Stage 7	Constructing the research hypotheses inventory
Stage 8	Identifying the effect sizes
Stage 9	Describing the articles
Stage 10	Describing the effect sizes
Stage 11	Estimating the parameters
Stage 12	Elaborating the moderator variables
Stage 13	Assessing the stability of findings over time
Stage 14	Specifying the recommendations

The effect size indicator used for statistical analysis was the Pearson Product-Moment Correlation Coefficient. The correlation coefficient expresses the relationship between a distinct predictor variable and a distinct criterion variable and can be cumulated across studies (Hunter & Schmidt, 1990).

The procedures utilized in this study are both reliable and valid. All primary studies treating burnout and special educators (as identified by any of 8 major databases: Dissertation Abstracts International, ERIC, PsycInfo,

Education Abstracts, Wilson, Article First, *Educational Administration Abstracts*, and Social Sciences Abstracts) published through December 31, 1998, were included in the original search of literature.

Findings

Five role constructs were found to be present in the literature on burnout among special educators: role ambiguity, role conflict, role expectations conflict, role overload, and self role concept. Meta-analyses were conducted for each of these role constructs and the various relationships they share with burnout constructs. With the exception of role conflict, effect sizes were given or derived for each of the role constructs and six distinct burnout constructs (frequency and intensity of emotional exhaustion, depersonalization, and personal accomplishment). Multiple effect sizes for role conflict were found only for its relationship to emotional exhaustion. Results for each of these meta-analyses are found in Tables 2, 3, 4, 5, and 6.

Table 2

Meta-Analytic Findings for Role Ambiguity and Burnout Constructs

Research Hypothesis	Effect Sizes	Population Effect Size	Explained Variance %	Standard Deviation
Frequency of emotional exhaustion related to role ambiguity	7	0.124	1.538	0.405
Intensity of emotional exhaustion related to role ambiguity	7	0.135	1.833	0.288
Frequency of depersonalization related to role ambiguity	7	0.148	2.184	0.138
Intensity of depersonalization related to role ambiguity	7	0.081	0.651	0.234
Frequency of personal accomplishment related to role ambiguity	7	-0.063	0.401	0.163
Intensity of personal accomplishment related to role ambiguity	7	-0.186	3.471	0.113

The findings described in Table 2 indicate the relationships that currently exist in the literature between burnout and role ambiguity. Interestingly, all of the effect sizes stated or derived for the relationship between burnout and role ambiguity were generated from studies in which special education administrators comprised the target population; no data for special education teachers were found. The average effect size estimate for both the

frequency and intensity of emotional exhaustion as it relates to role ambiguity indicates a small positive relationship between these two constructs; thus, as role ambiguity increases, so do the frequency and intensity of emotional exhaustion. With the burnout construct of depersonalization, however, the results were somewhat different. The frequency of depersonalization shares a small positive relationship with role ambiguity, again suggesting that as role ambiguity increases the frequency of depersonalization increases. However, the intensity of depersonalization maintains only a negligible relationship with role ambiguity, indicating that no clear conclusions about the relationship can be drawn. The frequency and intensity of personal accomplishment also yielded conflicting results. The intensity of personal accomplishment reveals a small but clearly inverse relationship with role ambiguity, meaning that as role ambiguity increases, the intensity of personal accomplishment decreases. The frequency of personal accomplishment, while still conveying a negative and thus inverse relationship, yielded an average effect size so small that the results can only be termed as negligible.

One additional noteworthy trend among all of these relationships is the very small amount of explained variance that is indicated. Thus, the relationships described by these meta-analyses, although important, account for only a small percentage of the variance that occurs in burnout among special educators. Accordingly, additional studies need to take place in order to fill in these gaps indicated by high amounts of unexplained variance. While understanding and alleviating role ambiguity is a step in the right direction, the data indicate that this solution alone will not solve the burnout dilemma.

The relationships described above, describing burnout constructs as they relate to role ambiguity, could have important implications for administrator preparation programs. If role ambiguity has a clear relationship to burnout among special education administrators, then clearly the duty exists for implementing techniques in preparation programs that will both alert future administrators to the existence of role ambiguity as well as give them potential avenues for alleviating role ambiguity. It is not an easy task, but it is certainly a necessary one.

Table 3

Meta-Analytic Findings for Role Conflict and Burnout Constructs

Research Hypothesis	Effect Sizes	Population Effect Size	Explained Variance %	Standard Deviation
Emotional exhaustion related to role conflict	4	0.380	14.419	0.000

The only relationship between role conflict and burnout specified quantitatively in the literature was role conflict's relationship with emotional exhaustion. As Table 3 indicates, role conflict and emotional exhaustion are represented by an average effect size of 0.380, which is a medium-sized effect size (Cohen, 1988). Thus, as role conflict increases, so does emotional exhaustion. Furthermore, this relationship also has almost 14.5% explained variance, which is quite a bit larger than was found in other meta-analyses.

Table 4

Meta-Analytic Findings for Role Expectations Conflict and Burnout Constructs

Research Hypothesis	Effect Sizes	Population Effect Size	Explained Variance %	Standard Deviation
Frequency of emotional exhaustion related to role expectations conflict	6	0.310	9.634	0.000
Intensity of emotional exhaustion related to role expectations conflict	6	0.186	3.454	0.000
Frequency of depersonalization related to role expectations conflict	6	0.078	0.603	0.000
Intensity of depersonalization related to role expectations conflict	6	0.029	0.084	0.178
Frequency of personal accomplishment related to role expectations conflict	6	-0.141	1.995	0.000
Intensity of personal accomplishment related to role expectations conflict	6	-0.330	10.911	0.000

Table 4 represents the relationships between burnout constructs and role expectations conflict. This role construct, as measured by the Organizational Role Stress Scale, is very similar to the traditional definition of role conflict, although in this case the conflict is measured strictly as it relates to the person's expectations of his/her job (Riffel, 1986). All of the effect sizes for the relationships in Table 4 were taken from a single study (Riffel, 1986), which will necessarily affect the applicability of the results; furthermore, as with role ambiguity, all of the effect sizes in this relationship were generated for the target population of special education administrators. As Table 4 indicates, role expectations conflict shares a medium-sized positive effect size with the frequency of emotional

exhaustion, meaning that this burnout construct increases as role expectations conflict increases. The only other medium-sized effect size generated in these meta-analyses was found between role expectations conflict and the intensity of personal accomplishment, which shared an average effect size of –0.330. The negative value indicates an inverse relationship, in which the intensity of personal accomplishment decreases as role expectations conflict increases. Both of the previously-mentioned relationships had approximately 10-11% explained variance, whereas the other relationships generated much smaller amounts. The intensity of emotional exhaustion and the frequency of personal accomplishment both demonstrated small average effect sizes with role expectations conflict; the relationship between the depersonalization constructs and role expectations conflict were negligible. Another noteworthy item in Table 4 is the number of standard deviation values that resulted in 0; this figure suggests that all of the variation in the sample sizes can be accounted for by sampling error, indicating that the presence of a moderator variable is unlikely.

Table 5

Meta-Analytic Findings for Role Overload and Burnout Constructs

Research Hypothesis	Effect Sizes	Population Effect Size	Explained Variance %	Standard Deviation
Frequency of emotional exhaustion related to role overload	6	0.516	26.603	0.248
Intensity of emotional exhaustion related to role overload	6	0.431	18.551	0.246
Frequency of depersonalization related to role overload	6	0.138	1.899	0.182
Intensity of depersonalization related to role overload	6	0.082	0.674	0.236
Frequency of personal accomplishment related to role overload	6	-0.126	1.576	0.189
Intensity of personal accomplishment related to role overload	6	-0.286	0.082	0.000

As with the data in Table 4, the results of Table 5 were derived from a single primary study and a single author (Riffel, 1986). Again all of the effect sizes represent the target population of special education administrators, rather than teachers. Clearly the relationship that stands out in this group is the relationship between

role overload and the frequency of emotional exhaustion, represented by the average effect size of 0.516. This effect size meets Cohen's (1988) definition of a large effect size, the only effect size that does so, and it represents almost 27% of the explained variance. This large positive relationship indicates that as role overload increases, the frequency of emotional exhaustion increase as well. The intensity of emotional exhaustion also demonstrates a strong positive relationship with overload, with an average effect size of 0.431; it accounts for 18.6% of the explained variance. Role overload has much smaller relationships with depersonalization, with the frequency of this construct generating a 0.138 average effect size and its intensity generating only a negligible 0.082. With personal accomplishment, role overload shares small, inverse relationships, meaning that as role overload increases personal accomplishment decreases. The relationship with the intensity of personal accomplishment has an average effect size of –0.286, and the relationship with the frequency of this construct has an average effect size of –0.126.

Table 6

Meta-Analytic Findings for Self Role Concept and Burnout Constructs

Research Hypothesis	Effect Sizes	Population Effect Size	Explained Variance %	Standard Deviation
Frequency of emotional exhaustion related to self role concept	6	0.380	14.464	0.110
Intensity of emotional exhaustion related to self role concept	6	0.337	11.343	0.159
Frequency of depersonalization related to self role concept	6	0.163	2.641	0.090
Intensity of depersonalization related to self role concept	6	0.125	1.574	0.188
Frequency of personal accomplishment related to self role concept	6	-0.253	6.391	0.000
Intensity of personal accomplishment related to self role concept	6	-0.220	4.861	0.000

Table 6 represents the meta-analyses conducted for the relationship between self role concept and various burnout constructs. Again all of the data in this table were generated from a single author's study (Riffel, 1986), and all of the relationships represented were measured for the target population of special education administrators.

Emotional exhaustion demonstrated the most powerful relationships with self role concept, with both the frequency and intensity average effect sizes falling in Cohen's (1988) medium range. Explained variance amounts for both of these constructs were good as well. Thus, the frequency and intensity of emotional exhaustion clearly increase with self role concept. The constructs of depersonalization were both represented by small, though clearly not negligible, positive effect sizes. The frequency and intensity of personal accomplishment both share small but even more powerful relationship with self role concept; as previously noted with personal accomplishment, these relationships are inverse, meaning that as self role concept increases, personal accomplishment decreases.

Recommendations

This study analyzed all of the literature on special educator burnout, placing a heavy emphasis on those burnout hypotheses that were repeated often in the literature. Among these hypotheses, the relationship of burnout to role ambiguity and other role constructs clearly stands out. Both the average effect sizes and the amounts of explained variance were significantly larger for role constructs than they were for other constructs such as demographic variables. Thus, a number of important recommendations may be drawn from this study, both on the researcher level as well as on the practitioner level.

Implications for Research

The operationalization of constructs is, at best, inconsistent and should be pursued much more stringently in the research. Burnout, for example, is defined in a number of ways. Some authors describe burnout is as a form of job stress (Cherniss, 1988; Dedrick & Raschke, 1990; Maslach, 1982; Wisniewski & Gargiulo, 1997). Others describe burnout as a reaction to stress (Greer & Greer, 1992) or as a number of physiological and psychological symptoms (Gold, 1989; Guglielmi & Tatrow, 1990; Hudson & Meagher, 1983). More clearly defined operationalization of constructs would increase the validity and reliability of all research, particularly research using meta-analysis and/or techniques of quantitative synthesis.

The coefficient of determination is used to describe the amount of explained variance in a study (McNamara, 1991). The amount of explained variance can therefore be used as an indicator of practical significance: a large amount of explained variance indicates practically significant findings, whereas a small amount of explained variance – meaning that a large amount of variance is unexplained by the variable being studied – would indicate low practical significance. Indicating the amount of explained variance in a study, then, would be beneficial to understanding the practical significance of research findings.

The study of burnout among special educators should include special education administrators. Of the 1605 effect sizes reported or derived in the initial inquiry of this study, only 23.6% dealt with the target population of administrators (i.e. special education directors). Likewise, only five of the 46 primary studies, or 10.87%, presented findings for special education directors. Because of the importance of administrators in special education, the study of burnout among these professionals should be of primary concern for future research studies.

However, it is important to note that the study of role constructs involved administrators much more often than it did teachers. This also suggests a need for further research. The study of how constructs such as role ambiguity, role conflict, and role overload impact special education teachers is lacking in quantitative findings. Additional studies in this area are needed.

Implications for Practitioners

One way that administrators may deal with role ambiguity and other role tensions is through the development of coping strategies (Gmelch & Gates, 1998). Coping strategies are implemented by persons who experience stressors but believe they can successfully handle and/or overcome these problems. According to this theory, stress can occur in any of four means: task-based, role-based, conflict-mediating, or boundary-spanning. Likewise, the coping mechanisms that a person develops to deal with these stress types are classified into the same four categories. When a person experiences stress but can develop or utilize a coping strategy to deal with this stress, then burnout is less likely to occur. Just as coping strategies are used in handling role ambiguity, they may prevent burnout in the same way.

Role conflict and role ambiguity can be handled by other means as well. Along the same lines as coping strategies, Hackman and Oldham (as cited in Catanzaro, 1997; Fried & Ferris, 1987) developed the Job Characteristics Model to explain what characteristics of certain jobs resulted in reduced role ambiguity, reduced role conflict, higher motivation or satisfaction, and therefore less burnout. The Job Characteristics Model focused on five core characteristics of any job: skill variety, task identity, task significance, autonomy, and feedback. The greater the level of these core characteristics within a person, the less likely he/she is to experience burnout. Also important in this model is the educator's growth-need strength, which indicates how important personal growth and success are to the individual. According to the Job Characteristics Model, any job can be modified so that it is more satisfying to the employee, thereby making the employee less susceptible to burnout. Because several of the core

characteristics mentioned above (i.e. feedback, autonomy, identity) are often identified as problem areas in special education, this model is particularly relevant to understanding burnout among special educators.

Furthermore, there are areas of administrator and educator preparation programs that should address burnout as well. Ensuring that prospective special educators are prepared for their jobs – the stress, role conflict, role overload, and certainly the role ambiguity that will likely occur – should be an important part of any preparation program. Likewise, providing future special education administrators and teachers with the tools to develop or enhance their coping skills, conflict mediation skills, and self-awareness skills is also a valuable consideration (Gmelch & Chan, 1995; Gmelch & Torelli, 1994). Adequate preparation for the varied tasks that will face a future special educator is critical to preventing job burnout among these professionals.

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